

# Notice of Allowability

Application No.

10/749,069

Examiner

Brian Ensey

Applicant(s)

BASSEAS, STAVROS PHOTIOS

Art Unit

2615

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment dated 10/16/06.
2. ☒ The allowed claim(s) is/are 19, 21, 22, 24-31, 33, 34, 36, 37, 39 and 40 renumbered 1-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 19, 21, 22, 24-31, 33, 34, 36, 37, 39 and 40 are allowed.

The following is an examiner's statement of reasons for allowance: The present invention is directed to a fitting system and method for programming a separate hearing aid. Independent claim 19 identifies the uniquely distinct features of software and circuitry for the receipt of real-time feedback from a hearing aid user in response to presented pre-stored audio stimuli and a processor for executing a second software which implements fuzzy logic processing in response to the user feedback in combination with all the disclosed limitations of independent claim 19. Independent claim 21 identifies the uniquely distinct features of software and circuitry for the receipt of real-time feedback from a hearing aid user in response to presented pre-stored audio stimuli and a processor for executing a third software for establishing an initial set of parameters by neural network processing of selected user data in combination with all the disclosed limitations of independent claim 21. Independent claim 24 identifies the uniquely distinct features of software and circuitry for the receipt of real-time feedback from a hearing aid user in response to presented pre-stored audio stimuli and a processor for executing a second software which implements fuzzy logic processing in response to the user feedback to modify at least one parameter of the hearing aid in combination with all the disclosed limitations of independent claim 24. Independent claim 30 identifies the uniquely distinct features of circuitry for the receipt of real-time feedback from a hearing aid user in response to presented pre-stored audio stimuli and fuzzy logic processing software and circuitry for executing fuzzy logic in combination with all the disclosed limitations of independent claim 30. Independent claim 34

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identifies the uniquely distinct features of software and circuitry for the receipt of real-time feedback from a hearing aid user in response to presented pre-stored audio stimuli and circuitry responsive to the user feedback to modify a current set of parameters of the hearing aid where the circuitry implements fuzzy logic processing in combination with all the disclosed limitations of independent claim 34. Independent claim 37 identifies the uniquely distinct features of a method for optimizing parameters for a programmable hearing aid including presenting pre-stored audio stimuli to a hearing aid, receiving feedback responsive to the stimuli by a user and processing the feedback using fuzzy logic methodology to alter the existing parameters of the hearing aid processing in combination with all the disclosed limitations of independent claim 37.

The closest prior art, Shennib (US 5825894) teaches a hearing aid fitting system for a programmable hearing aid; Voroba (US 4759070) teaches a fitting system utilizing pre-stored audio stimuli and user feedback to select components to construct a hearing aid; and Weinfurter (US 6035050) teaches a programmable hearing aid coupled to circuitry for transferring performance parameters determined during testing by the user to the programmable processor of a hearing aid. The prior art fails to anticipate or render the independent claims obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, Va. 22313-1450

**Or faxed to:**

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".  
Hand-delivered responses should be brought to:

Customer Service Window  
Randolph Building  
401 Dulany Street  
Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BKE  
October 20, 2006

  
SINH TRAN  
SUPERVISORY PATENT EXAMINER